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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,299	02/09/2004	Tomomi Yamada	118041	8749
25944	7590	04/12/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			ESHETE, ZELALEM	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/773,299	Applicant(s) YAMADA ET AL.	
	Examiner Zelalem Eshete	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-12 and 14-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,5-12 and 14-18 is/are allowed.
- 6) ☒ Claim(s) 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the RCE filed on 03/09/2005.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoeda et al. (6,276,317).

Yoeda discloses a method and a valve drive system for an internal combustion engine, comprising: a plurality of valves (see figure 4, numerals 66,68); springs urging each of the valves towards a middle position between a fully open position and a fully closed position (see figure 2); magnets each supplied with current to generate electromagnetic force to retain each of the valves at the fully open or closed position against the urging force of each spring (see numerals 90,94); a controller that is adapted to stop application of current to at least one magnet for a first valve or a first valve group that is associated with a first cylinder at a first timing (see figure 4, #2 cylinder, valve 68); and stop application of current to at least one magnet for a second valve or a second valve group that is associated with a second cylinder at a second

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timing that is a predetermined time later from the first timing when the internal combustion engine is to be stopped (see figure 4, #1 cylinder, valve 68); wherein the predetermined time being the time needed for a free oscillation of the first valve to decay to a specific level (see figure 4, #2 cylinder, valve 68).

Allowable Subject Matter

3. Claims 1-3,5-12,14-18 are allowed.

Response to Arguments

4. Applicant's arguments filed 02/08/2005 have been fully considered but they are not persuasive.

5. With respect to applicant's argument on page 9: Although Yoeda deals with other purposes for the invention, Yoeda discloses all the claim limitations including the teaching of suppressing free oscillation of the valve when the internal combustion engine is to be stopped, in that, the controller is adapted to stop application of current to at least one magnet for a first valve or a first valve group that is associated with a first cylinder at a first timing (see figure 4, #2 cylinder, valve 68); and stop application of current to at least one magnet for a second valve or a second valve group that is associated with a second cylinder at a second timing that is a predetermined time later from the first timing when the internal combustion engine is to be stopped (see figure 4,

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#1 cylinder, valve 68); wherein the predetermined time being the time needed for a free oscillation of the first valve to decay to a specific level (see figure 4, #2 cylinder, valve 68).

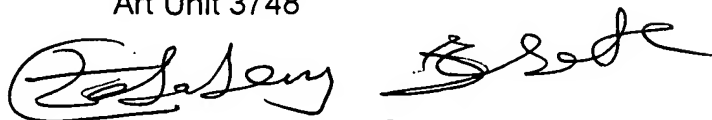
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zelalem Eshete whose telephone number is (703) 306-4239 or the new telephone is (571) 272-4860 effective 11/23/2004. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (703) 308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Zelalem Eshete
Examiner
Art Unit 3748



Thomas Denion
THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700